

U.S. Patent Application No. 08/575,433
Attorney Docket No. RIC-95-042

WJW
prompting, via the first gateway device, the calling device for a payment
method; and
validating the payment method prior to transmitting the connection request
to the second gateway device.

REMARKS

In the non-final Office Action, the Examiner rejected claims 1, 4-7, 9, 10, 26-31, and 34 under 35 U.S.C. § 112, second paragraph, as indefinite; rejected claims 1, 4-7, 9-11, 14-17, 19, 20, 22, 26-28, 31-33, and 35-37 under 35 U.S.C. § 102(e) as anticipated by NORRIS et al. (U.S. Patent No. 5,805,587); objected to claims 29 and 30 as allowable if rewritten in to include the features of the base claim and any intervening claims; and objected to claim 34 if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph, and to include the features of the base claim and any intervening claims.

By way of this amendment, Applicant amends claims 1, 11, 22, 29, 33-35, and 37 to improve form and adds new claims 38 and 39. No new matter has been added by way of this amendment. Claims 1, 4-7, 9-11, 14-17, 19, 20, 22, and 26-39 are pending.

Applicant notes with appreciation the indication that claims 29 and 30 would be allowable if rewritten in independent form. Applicant amends claim 29 herewith to include the features of base claim 1. Therefore, claim 29 is allowable over the art of record. Moreover, since claim 30 depends from claim 29, Applicant submits that claim 30 is also allowable over the art of record.

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Claims 1, 4-7, 9, 10, 26-31, and 34 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. In particular, the Examiner alleged that the feature "said digital packets" recited in claim 1 and "the unit charge" recited in claim 34 lack sufficient antecedent basis (Office Action, page 2). While not acquiescing in the Examiner's position, Applicant has amended claims 1 and 34 to address the Examiner's concerns. Accordingly, reconsideration and withdrawal of the rejection of claims 1, 4-7, 9, 10, 26-31, and 34 are respectfully requested.

Moreover, Applicant has amended claim 34, which the Examiner indicated contained allowable subject matter, to include the features of base claim 22. Therefore, Applicant submits that claim 34 is allowable over the art of record.

Claims 1, 4-7, 9-11, 14-17, 19, 20, 22, 26-28, 31-33, and 35-37 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by NORRIS et al. Applicant respectfully traverses this rejection.

NORRIS et al. is directed to a system that alerts a subscriber whose telephone station set is connected to the Internet of a waiting call via the Internet connection (Abstract).

In contrast, the present invention recited in amended independent claim 1, for example, includes a combination of features, including an originating circuit-switched network for providing originating signals in response to voice input; an originating gateway computer for converting the originating signals into digital data packets; a terminating gateway computer that accepts out of band signaling and converts the digital data packets into terminating signals; a terminating circuit-switched network for

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providing voice output in response to the terminating signals, and a packet-switched network for transmitting the digital data packets from the originating gateway computer to the terminating gateway computer, where at least one of the originating and terminating gateway computers comprises a component for routing the digital data packets through the packet-switched network from the originating gateway computer to the terminating gateway computer; and where the terminating circuit-switched network is capable of providing first return signals to the terminating gateway computer in response to return voice input, the terminating gateway computer comprises a component for converting the first return signals into return packets of return digital data, at least one of the originating and terminating gateway computers comprises a component for routing the return packets through the packet-switched network from the terminating gateway computer to the originating gateway computer, and where the originating gateway computer comprises a component for converting the return packets into second return signals.

A proper rejection under 35 U.S.C. § 102 requires that the reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. Applicant respectfully submits that NORRIS et al. does not disclose or suggest each of the features of claim 1.

For example, NORRIS et al. does not disclose or suggest a terminating gateway computer that accepts out of band signaling and converts the digital data packets from the originating gateway computer into terminating signals. The Examiner relied on col. 3, line 33, and col. 7, lines 65-66, of NORRIS et al. for allegedly disclosing the terminating

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gateway computer (Office Action, page 3). Applicant submits that these sections of NORRIS et al. do not disclose or even suggest the recited terminating gateway computer.

Col. 3, lines 25-34, of NORRIS et al. discloses:

Such elements include PBX 235 and Internet Access Unit (IAU) 255, in which PBX 235, may be, for example, the Definity telecommunications system available from AT&T and in which IAU 255 may be, for example, the Ascend MAX 4000 apparatus available from Ascend Communications, Inc. of Mountain View, Calif. PBX 235 and IAU 255, more particularly, are designed to present an interface to a communication path comprising 23 B channels and one D channel, e.g., T1 carrier 150-10 and 150-11.

This section of NORRIS et al. in no way discloses or suggests a terminating gateway computer that accepts out of band signaling and converts the digital data packets from the originating gateway computer into terminating signals. In fact, this section of NORRIS et al. merely describes some of the components of the Internet Access Server 200, which the Examiner alleges corresponds to the recited originating gateway computer (Office Action, page 3). It is unclear how the Examiner can allege, on the one hand, that the recited originating gateway computer corresponds the Internet Access Server 200 and at the same time allege that the terminating gateway computer, which receives digital data packets from the originating gateway computer via a packet-switched network, can be a component within the originating gateway computer. This section of NORRIS et al. in no way supports the Examiner's allegations.

Col. 7, lines 65-67, of NORRIS et al. discloses:

That is, CPU 248 converts a series of voice packets into a digital voice signal, which TLI 246 then supplies to PBX 235 via path 270-1.

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This section of NORRIS et al. merely discloses the conversion of voice packets to a digital voice signal through the use of CPU 248. This section of NORRIS et al. does not disclose or suggest a terminating gateway computer that accepts out of band signaling and converts the digital data packets from the originating gateway computer into terminating signals. In fact, NORRIS et al. specifically discloses that CPU 248 is a component of Internet Access Server 200 (see Fig. 3). As set forth above, it is unclear how the Examiner can allege, on the one hand, that the recited originating gateway computer corresponds the Internet Access Server 200 and at the same time allege that the terminating gateway computer, which receives digital data packets from the originating gateway computer via a packet-switched network, can be a component within the originating gateway computer. This section of NORRIS et al. in no way supports the Examiner's allegations.

Even assuming, for the sake of argument, that one skilled in the art could reasonably construe NORRIS et al.'s single Internet Access Server 200 to correspond to two separate gateway computers, Applicant submits that NORRIS et al. does not disclose or suggest that Internet Access Server 200 performs the functions recited in claim 1 with respect to both the originating and terminating gateway computers. That is, if NORRIS et al.'s Internet Access Server 200 could function as both the originating gateway computer and terminating gateway computer, it would require that NORRIS et al. disclose that Internet Access Server 200 transmits digital data packets through a packet-switched network and then receives those same digital data packets from the packet-switched network. Put another way, Applicant's claim 1 requires, based on the

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Examiner's allegation that NORRIS et al.'s Internet Access Server 200 corresponds to both the originating gateway computer and the terminating gateway computer, that NORRIS et al. disclose that the Internet Access Server 200 transmits digital data packets to itself through a packet-switched network. The disclosure of NORRIS et al. in no way supports this position.

NORRIS et al. does not further disclose a packet-switched network that transmits digital data packets from the originating gateway computer to the terminating gateway computer. The Examiner relied on element 300 (the Internet) in Fig. 1 of NORRIS et al. as allegedly corresponding to the recited packet-switched network (Office Action, page 3). While the Internet may be considered as a packet-switched network, NORRIS et al. does not disclose or even suggest that the Internet 300 routes digital data packets from an originating gateway computer to a terminating gateway computer. In fact, as set forth above, NORRIS et al. does not disclose or suggest a terminating gateway computer. Therefore, NORRIS et al. cannot disclose or suggest a packet-switched network that transmits digital data packets from the originating gateway computer to the terminating gateway computer.

Since NORRIS et al. does not teach every feature of the claimed invention either explicitly or impliedly, the rejection of claim 1 under 35 U.S.C. § 102(e) based on NORRIS et al. is improper.

For at least the foregoing reasons, Applicant respectfully requests that the rejection of claim 1 be reconsidered and withdrawn.

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Claims 4-7, 9, 10, 26-28, and 31 depend from claim 1. Therefore, Applicant submits that these claims are not anticipated by NORRIS et al. for at least the reasons given above with respect to claim 1. Moreover, these claims recite additional features not disclosed or suggested by NORRIS et al.

For example, claim 4 recites that the terminating gateway computer includes a terminating buffer component for storing the digital packets prior to the conversion thereof into the terminating signals. Since, as set forth above, NORRIS et al. does not disclose or suggest a terminating gateway computer, NORRIS et al. cannot disclose a terminating gateway computer that includes a terminating buffer component. The Examiner relied on element 250 (memory) in Fig. 3 of NORRIS et al. for allegedly disclosing the recited terminating buffer component (Office Action, pages 3 and 4). Applicant submits that NORRIS et al.'s memory 250 cannot reasonably be construed to be a terminating buffer component of a terminating gateway computer since memory 250 is located within Internet Access Server 200, which the Examiner alleges corresponds to the recited originating gateway computer.

Moreover, NORRIS et al. does not disclose or suggest that memory 250 stores digital packets prior to the conversion thereof into terminating signals. To the contrary, NORRIS et al. appears to disclose that memory 250 stores data records for subscribers (see, for example, col. 2, lines 46-51, and col. 7, lines 1-4).

For at least these additional reasons, Applicant submits that NORRIS et al. does not anticipate claim 4.

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Claim 5 recites that the terminating gateway computer includes a component for rearranging the stored digital packets to maintain proper packet order. Since, as set forth above, NORRIS et al. does not disclose or suggest a terminating gateway computer, NORRIS et al. cannot disclose a terminating gateway computer that includes a component for rearranging the stored digital packets. With respect this feature, the Examiner alleged that "Norris also teaches ... rearranging for a proper packet order (e.g. calls is process in order)" (Office Action, pages 3 and 4). Applicant disagrees.

As set forth above, NORRIS et al. is directed to a system that alerts a subscriber whose telephone station set is connected to the Internet of a waiting call via the Internet connection (Abstract). NORRIS et al. does not disclose or suggest that the Internet Access Server 200 or any other device in the NORRIS et al. system rearranges stored digital packets to maintain proper packet order. The Examiner's reference to NORRIS et al.'s alleged teaching of calls being processed in order in no way addresses this feature of claim 5. That is, rearranging digital packets to maintain proper packet order in no way relates to processing calls in order.

For at least these additional reasons, Applicant submits that NORRIS et al. does not anticipate claim 5.

Similar arguments to those presented above with respect to claim 5 can be made for Applicant's claim 10 that recites "wherein said originating gateway computer further comprises a component for rearranging said stored return packets to maintain proper packet order." NORRIS et al. does not disclose or even suggest the Internet Access

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Server 200 or any other device in the NORRIS et al. system rearranging stored digital packets to maintain proper packet order.

Claim 27 recites that the originating gateway computer includes a component for providing a ring back tone or a busy tone to a telephone connected to the originating circuit-switched network. The Examiner admitted that NORRIS et al. does not disclose this feature and alleged that such a feature is well known (Office Action, page 4).

Applicant reminds the Examiner that a proper rejection under 35 U.S.C. § 102 requires that the reference, namely NORRIS et al., teach every aspect of the invention either explicitly or impliedly. The Examiner's admission that NORRIS et al. does not disclose the feature of claim 27 is direct evidence that the rejection of claim 27 under 35 U.S.C. § 102 based on NORRIS et al. is improper.

For at least these additional reasons, Applicant requests that the rejection of claim 27 under 35 U.S.C. § 102(e) based on NORRIS et al. be reconsidered and withdrawn.

Amended independent claims 11 and 22 recite features similar to the ones described above with respect to claim 1. Therefore, Applicant submits that claims 11 and 22 are not anticipated by NORRIS et al. for reasons similar to those given above with respect to claim 1.

Claims 14-17, 19, and 20 depend from claim 11. Applicant submits that these claims are not anticipated by NORRIS et al. for at least the reasons given above with respect to claim 11.

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Claims 32, 33, and 35-37 depend from claim 22. Applicant submits that these claims are not anticipated by NORRIS et al. for at least the reasons given above with respect to claim 22.

New claims 38 and 39 recite features not disclosed or suggested by NORRIS et al. For example, new claim 38 recites a method for establishing a call connection that includes receiving, at a first gateway device, a destination address of a called device from a calling device over a first circuit-switched network; transmitting, in response to receiving the destination address, a connection request from the first gateway device to a second gateway device over a packet-switched network; connecting, via the second gateway device, to the called device through a second circuit-switched network using the destination address; and establishing a call connection between the calling device and the called device through the first circuit-switched network, the packet-switched network, and the second circuit-switched network in response to the connecting. NORRIS et al. does not disclose or suggest this combination of features. For example, as set forth above with respect to claim 1, NORRIS et al. does not disclose or suggest a first gateway device and a second gateway device.

New claim 39 depends from claim 38 and recites features similar to those recited in allowed claim 34. Therefore, Applicant submits that NORRIS et al. does not anticipate claim 39.

In view of the foregoing amendments and remarks, Applicant respectfully requests the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 13-2491 and please credit any excess fees to such deposit account.

Respectively submitted,

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ATTACHMENT SHOWING CHANGES MADE

IN THE CLAIMS:

Claims 1, 11, 22, 29, 33-35, and 37 were amended as follows:

1. (Three Times Amended) A telecommunications system comprising:

an originating circuit-switched network for providing originating signals in response to voice input,

an originating gateway computer for converting said originating signals into digital data packets [of digital data],

a terminating gateway computer that accepts out of band signaling and converts said digital data packets into terminating signals,

a terminating circuit-switched network for providing voice output in response to said terminating signals, and

a packet-switched network for transmitting said digital data packets from said originating gateway computer to said terminating gateway computer, at least one of said originating and terminating gateway computers comprising a component for routing said digital data packets through said packet-switched network from said originating gateway computer to said terminating gateway computer;

wherein said terminating circuit-switched network is capable of providing first return signals to said terminating gateway computer in response to return voice input,

wherein said terminating gateway computer comprises a component for converting said first return signals into return packets of return digital data,

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wherein at least one of said originating and terminating gateway computers comprises a component for routing said return packets through said packet-switched network from said terminating gateway computer to said originating gateway computer,

and wherein said originating gateway computer comprises a component for converting said return packets into second return signals.

11. (Three Times Amended) A telecommunications system comprising:
 - an originating [switched network] gateway computer for providing digital packets corresponding to originating signals produced in response to voice input,
 - a gateway computer that accepts out of band signaling and converts said digital packets into [packets of] terminating signals,
 - a circuit-switched network for providing voice output in response to said terminating signals, and
 - a packet-switched network for transmitting said digital packets from said originating gateway [network] computer to said gateway computer, at least one of said originating [network] gateway computer and said gateway computer comprising a component for routing said digital packets through said packet-switched network from said originating [network] gateway computer to said gateway computer;
- wherein said circuit-switched network is capable of providing first return signals to said gateway computer,

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wherein said gateway computer comprises a component for converting said first return signals into packets of return digital [date] data

wherein at least one of said originating [network] gateway computer and said gateway computer comprises a component for routing said return packets through said packet-switched network from said gateway computer to said originating [network] gateway computer.

and wherein said originating [network] gateway computer comprises a component for converting said return packets into second return signals.

22. (Four Times Amended) A telecommunications [system] method comprising [steps of]:

providing originating digital packets for transmission from an originating [network] gateway computer, said originating digital packets corresponding to originating signals produced in response to originating voice input;

routing said originating digital packets from said originating [network] gateway computer to a gateway computer, that accepts out of band signaling, through a packet-switched network [in response to] via an originating routing component in at least one of said originating [network] gateway computer and said gateway computer;

converting said originating digital packets into terminating signals for transmission from said gateway computer;

transmitting said terminating signals through a circuit-switched network for providing terminating voice output in response to said terminating signals;

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providing first return signals to said gateway computer in response to
return voice input into said circuit-switched network;

converting said return signals into return digital packets of return digital
data for transmission from said gateway computer;

routing said return digital packets through said packet-switched network
from said gateway computer to said originating [network] gateway computer [in response
to] using said originating routing component or another routing component in said
originating [network] gateway computer or said gateway computer;

and converting said return digital packets into second return signals.

29. (Amended) A telecommunications system [according to claim 1,]
comprising:

an originating circuit-switched network for providing originating signals
in response to voice input.

an originating gateway computer for converting said originating signals
into digital data packets,

a terminating gateway computer that accepts out of band signaling and
converts said digital data packets into terminating signals.

a terminating circuit-switched network for providing voice output in
response to said terminating signals, and

a packet-switched network for transmitting said digital data packets from
said originating gateway computer to said terminating gateway computer, at least one of

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said originating and terminating gateway computers comprising a component for routing said digital data packets through said packet-switched network from said originating gateway computer to said terminating gateway computer;

wherinc said terminating circuit-switched network is capable of providing first return signals to said terminating gateway computer in response to return voice input.

wherein said terminating gateway computer comprises a component for converting said first return signals into return packets of return digital data.

wherein at least one of said originating and terminating gateway computers comprises a component for routing said return packets through said packet-switched network from said terminating gateway computer to said originating gateway computer.

wherein said originating gateway computer comprises a component for converting said return packets into second return signals, and

wherein at least one of said originating and terminating gateway computers comprises a time-division multiplexing bus interconnecting at least one digital trunk interface with a digital signal processor and an application-specific integrated circuit, and a system bus interconnecting said digital signal processor and said application-specific integrated circuit with a central processing unit and a random access memory.

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33. (Amended) A telecommunications method according to claim 22, [wherein said originating network comprises an originating gateway computer, and wherein said telecommunications method] further [comprises] comprising providing a ring back or busy tone to a telephone connected to said originating gateway computer through an originating network in response to signaling from a component of said originating gateway computer.

34. (Amended) A telecommunications method [according to claim 22 comprising the further steps of] comprising:

providing originating digital packets for transmission from an originating gateway computer, said originating digital packets corresponding to originating signals produced in response to originating voice input;

routing said originating digital packets from said originating gateway computer to a gateway computer, that accepts out of band signaling, through a packet-switched network via an originating routing component in at least one of said originating gateway computer and said gateway computer;

converting said originating digital packets into terminating signals for transmission from said gateway computer;

transmitting said terminating signals through a circuit-switched network for providing terminating voice output in response to said terminating signals;

providing first return signals to said gateway computer in response to return voice input into said circuit-switched network;

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converting said return signals into return digital packets of return digital data for transmission from said gateway computer;
routing said return digital packets through said packet-switched network from said gateway computer to said originating gateway computer using said originating routing component or another routing component in said originating gateway computer or said gateway computer;
converting said return digital packets into second return signals;
estimating [the] a unit charge for a call going through said gateway computer[,];
informing a caller providing said originating voice input about the unit charge[,]; and
recording a payment method specified by the caller before providing said terminating voice output.

35. (Amended) A telecommunications method according to claim 22, wherein said gateway computer is a terminating gateway computer, and wherein said method further comprises:

providing a caller's address and a callee's address to [an] said originating gateway computer [in said originating network],
authorizing a call between the caller and the callee using the caller's address,

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using the callee's address for said routing of the originating digital packets from the originating [network] gateway computer to the terminating gateway computer, causing the terminating gateway computer to dial out to the callee through said circuit switched network using the callee's address, and causing the originating gateway computer to provide a return tone for advising the caller of a status of the call.

37. (Amended) A telecommunications method according to claim 22, wherein [said gateway computer is an originating gateway computer, wherein said original circuit-switched network comprises] a caller is associated with at least one dedicated address [for a caller and a routing configuration from said dedicated address to said originating gateway computer], and wherein said method further comprises:

routing a call in accordance with [said] a routing configuration from a telephone at said dedicated address to said originating gateway computer,

passing said originating signals, the caller's address and a destination address to the originating gateway computer in accordance with said routing configuration,

authorizing a call by checking account information of the caller through an internal data base of the originating [circuit-switched network] gateway computer,

resolving a routing to [a terminating] said gateway computer using the destination address,

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and causing the originating gateway computer to send a control message
to the [terminating] gateway computer along with said dedicated address and said
destination address.